

Patent Abstracts of Japan

PUBLICATION NUMBER : 10030693
PUBLICATION DATE : 03-02-98

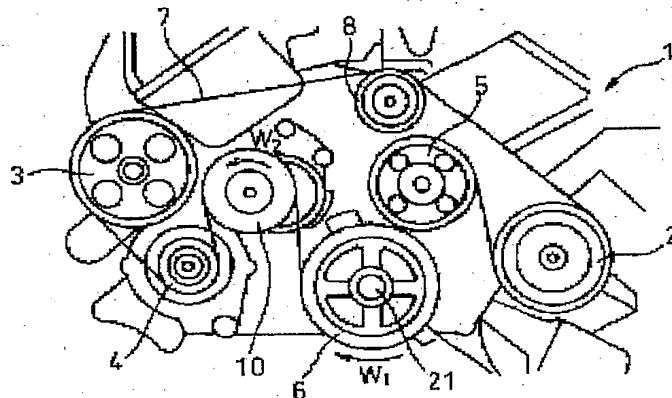
APPLICATION DATE : 16-07-96
APPLICATION NUMBER : 08186158

APPLICANT : NIPPON SOKEN INC;

INVENTOR : MATSUI HIROHITO;

INT.CL. : F16H 7/02

TITLE : BELT DEGRADATION JUDGING METHOD



ABSTRACT : PROBLEM TO BE SOLVED: To dispense with an inspection in an engine room by calculating the rotating speed ratio of a driving pulley and a driven pulley in first and second load conditions of a driving shaft, detecting an electric current value of the driving shaft, and judging that a belt is degraded when an inclination of an electric current value variation to a rotating speed ratio variation is larger than a prescribed value.

SOLUTION: An electric current value by an alternator pulley 4 at head lamp lights-out time is detected, and rotating speed of a crankshaft pulley 6 at that time and rotating speed of an automatic tensioner pulley 10 are detected, and the rotating speed ratio at lighting time is calculated. Then, a head lamp is lighted, and the rotating speed ratio at lighting time is calculated. An electric current value at lighting and lights-out time is converted into load torque of an auxiliary machine, and its variation ΔT and a variation ΔH in the respective rotating speed ratios are calculated, and whether or not an inclination $A = \Delta T / \Delta H$ is larger than a reference value is judged. A belt 7 is degraded, and when its core wire is partially cut, an elastic constant apparently increases. Therefore, when the inclination exceeds a prescribed value, it is judged that the belt is degraded.

COPYRIGHT: (C)1998,JPO